

REMARKS

The October 2, 2007 Office Action was based upon pending Claims 2-7, 9-12, 14-16, 23-29, 31-35, 37 and 39-49. This Amendment amends Claims 2, 10, 16, 23, 31, 37, and 44 and adds new Claims 50-54. Thus, after entry of this amendment, Claims 2-7, 9-12, 14-16, 23-29, 31-35, 37, and 39-54 are pending and are respectfully presented for further consideration.

In the Office Action the Examiner rejects Claims 2-7, 9-12, 14-16, 23-29, 31, 33-35, 37, 39-42 and 44-49 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,333,276 to Solari in view of U.S. Patent No. 5,644,729 to Amini et al. and further in view of U.S. Patent No. 5,692,200 to Carlson et al. Further, the Office Action rejected Claims 32 and 43 as being unpatentable over Solari in view of Amini and further in view of U.S. Patent No. 5,692,200 to Carlson et al. as applied to Claims 31 and 23 and further in view of U.S. Patent No. 5,664,122 to Rabe et al.

The Applicant notes that the subject application is amended by this paper to clearly recite and distinctly claim what the Applicant regards as the invention. For example, Claim 2 is amended to recite "A method for providing data transfers between a processor and a component, the method comprising:

...buffering a first data value with a first bi-directional data buffer and buffering a second data value with a second bi-directional data buffer, the first and second bi-directional data buffers being in communication with the processor and the component, wherein the first and second address buffers are separate from the first and second data buffers;

monitoring the first and second address buffers and the first and second data buffers to determine when the first address and data buffers and the second address and data buffers have completed a task and are available for a further task; ...and

controlling the order of bi-directional data flow through the first and second bi-directional data buffers such that data flows concurrently between the processor and the component while the processor is processing other instructions and, wherein controlling the order of the bi-directional data flow through the first and second bi-directional data buffers is variable and based on the priority status of the first and second data values."

The Applicant respectfully notes that the Solari, the Amini, the Carlson et al. and the Rabe patents in combination fail to disclose the combination of features recited in Claim 2 as currently amended. The Applicant believes that the ordinary artisan at the time of invention would not have found the Applicant's invention as currently claimed obvious considering the Solari, the Amini, the Carlson et al. and the Rabe patents and the level of ordinary skill and the nature of the problems addressed. The Applicant thus believes that Claim 2 is patentable over the Solari, the Amini, the Carlson et al. and the Rabe patents and the other art of record and respectfully requests that the rejection be withdrawn.

Claims 3-7, 9, and new claim 50 which depend from Claim 2, are believed to be patentable for the same reasons articulated above with respect to Claim 2, and because of the additional features recited therein.

Claim 10 is amended to recite "A method for controlling data transfers between a processor and a component, the method comprising:...

monitoring the plurality of address buffers and the first to determine when address buffers have completed a task and are available for a further task;

bi-directionally buffering with a plurality of bi-directional data buffers data transfers between the processor and the component, wherein said data transfers can be performed out of a previously defined order based on the priority status of each of the data transfers and such that data transfers can be performed concurrently while the processor is processing other instructions..."

The Applicant respectfully notes that the Solari, the Amini, the Carlson et al. and the Rabe patents in combination fail to disclose the combination of features recited in Claim 10 as currently amended. The Applicant believes that the ordinary artisan at the time of invention would not have found the Applicant's invention as currently claimed obvious considering the Solari, the Amini, the Carlson et al. and the Rabe patents and the level of ordinary skill and the nature of the problems addressed. The Applicant thus believes that Claim 10 is patentable over the Solari, the Amini, the Carlson et al. the Rabe patents and the other art of record and respectfully requests that the rejection be withdrawn. Claims 11, 12, 14-16, and new claim 51 which depend from Claim 10, are believed to be patentable for the same reasons articulated above with respect to Claim 10, and because of the additional features recited therein.

Claim 23 is amended to recite “A method for transferring addresses and data through a bi-directional buffer, the method comprising ...

monitoring the first and second address buffers and the first and second data buffers to determine when the first address and data buffers and the second address and data buffers have completed a task and are available for a further task;

reading the status bits of the first buffer to determine a first priority value of the first data;

reading the status bits of the third buffer to determine a second priority value of the second data; and

controlling the order of bi-directional data flow of the first data and the second data through said second and fourth bi-directional buffers in a variable manner based at least in part on said first and second priority values and controlling the bi-directional data flow such that data flows concurrently with processing by the second component of other instructions”.

The Applicant respectfully notes that the Solari, the Amini, the Carlson et al. the Rabe patents in combination fail to disclose the combination of features recited in Claim 23 as currently amended. The Applicant believes that the ordinary artisan at the time of invention would not have found the Applicant’s invention as currently claimed obvious considering the Solari, the Amini, the Carlson et al. and the Rabe patents and the level of ordinary skill and the nature of the problems addressed. The Applicant thus believes that Claim 23 is patentable over the Solari, the Amini, the Carlson et al. the Rabe patents and the other art of record and respectfully requests that the rejection be withdrawn.

Claims 24-29 and 52 which depend from Claim 23 are believed to be patentable for the same reasons articulated above with respect to Claim 23, and because of the additional features recited therein.

Similar amendments are made to the base Claims 31, 37, and 44. The Applicant respectfully notes that the Solari, the Amini, the Carlson et al. and the Rabe patents in combination fail to disclose the combination of features recited in Claims 31, 37, and 44 as currently amended. The Applicant believes that the ordinary artisan at the time of invention would not have found the Applicant’s invention as currently claimed obvious considering the

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Solari, the Amini, the Carlson et al. and the Rabe patents and the level of ordinary skill and the nature of the problems addressed. The Applicant thus believes that Claim 31, 37, and 44 are patentable over the Solari, the Amini, the Carlson et al. and the Rabe patents and the other art of record and respectfully requests that the rejections be withdrawn.

Claims 33-35 and 53, which depend from Claim 31, are believed to be patentable for the same reasons articulated above with respect to Claim 31, and because of the additional features recited therein. Claims 39-42, which depend from Claim 37, are believed to be patentable for the same reasons articulated above with respect to Claim 37, and because of the additional features recited therein. Claims 45-48 and 54, which depend from Claim 44, are believed to be patentable for the same reasons articulated above with respect to Claim 44, and because of the additional features recited therein.

No Disclaimers or Disavowals

Although the present communication includes alterations to the claims and characterizations of claim scope and referenced art, the Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

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Co-Pending Applications of Assignee

Applicant wishes to draw the Examiner's attention to the following co-pending applications of the present application's assignee.

Serial Number	Title	Filed
08/896,938 USP 6,073,190	SYSTEM FOR DYNAMIC BUFFER ALLOCATION COMPRISING CONTROL LOGIC FOR CONTROLLING A FIRST ADDRESS BUFFER AND A FIRST DATA BUFFER AS A MATCHED PAIR	July 18, 1997
09/589,043 USP 6,601,118	DYNAMIC BUFFER ALLOCATION FOR A COMPUTER SYSTEM	June 6, 2000

Copies of the patents, applications, and issues claims, including any office actions, applicant's responses, and notice of allowance, are available through PAIR. However, if the Examiner so requests, Applicant will be happy to provide the Examiner with copies of any patents, applications, pending claims, office actions, allowances, or any other documents, at any time.

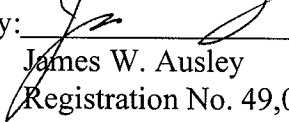
The Applicants believe that the subject Application is in a condition ready for allowance and respectfully request prompt issuance of a Notice of Allowability. However, should there remain any further impediments to the allowance of this Application that might be resolved by a telephone conference, the Examiner is respectfully requested to contact the Applicant's undersigned representative at the indicated telephone number.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

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